

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 3622-1 PCT-1	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2004/011287	International filing date (day/month/year) 08/10/2004	(Earliest) Priority Date (day/month/year) 10/10/2003
Applicant WITTE, Frank		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☒ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the title,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

CARTILAGE REGENERATION BY GENERATION OF CHONDRONS UNDER HIGH CONCENTRATIONS OF MAGNESIUM

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐ as suggested by the applicant,

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☒ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/011287A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61L27/02 A61L27/04 C12N5/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61L C12N A61K A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data, BIOSIS, EMBASE, INSPEC, COMPENDEX, FSTA

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 954 349 A (SHEETH PRAVIN B ET AL) 4 September 1990 (1990-09-04) column 1, line 62 - column 2, line 11 column 2, line 52 - line 59 column 3, line 3 - line 25 column 3, line 64 - column 4, line 28 column 8; examples 1-6	1-16
Y	US 6 211 143 B1 (GIL GABRIEL ESPELLETA ET AL) 3 April 2001 (2001-04-03) column 2, line 13 - line 47 example 1 tables 1-7 claims 1,6	1-16
	-/-	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

14 June 2005

Date of making of the international search report

29/06/2005

Name and mailing address of the ISA

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Authorized officer

Menidjel, R

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 248 368 B1 (VALLETTA GIAMPIERO) 19 June 2001 (2001-06-19) column 1, line 10 - line 17 column 3, line 51 - column 4, line 10 column 4, line 54 - line 65 column 5, line 52 - column 6, line 11 column 6, line 34 - line 40	1-16
Y	US 2002/082623 A1 (OSTHER KURT ET AL) 27 June 2002 (2002-06-27) page 2, paragraph 17 - paragraph 20 page 3, paragraph 31 page 3, paragraph 36 - paragraph 42	1-16
A	WO 97/18299 A (CASE WESTERN RESERVE UNIVERSITY) 22 May 1997 (1997-05-22) page 3, paragraph 1 - paragraph 3 page 6, paragraph 2 - page 7, paragraph 1	1-16
A	WO 02/061052 A (INTERFACE BIOTECH A/S; STORGAARD, PETER; OSTHER, KURT) 8 August 2002 (2002-08-08) page 3, line 13 - line 31 page 12, line 5 - page 13, line 31 claims 1-30	1-16
A	US 2003/103947 A1 (NOTH URLICH ET AL) 5 June 2003 (2003-06-05) page 2, line 42 - line 47 page 3, paragraph 55 - paragraph 59 claims 1-9	1-16
A	WO 01/82994 A (CURIS, INC; KELLNER, KARIN; LANG, KURT; PAPADIMITRIOU, APOLLON; LESER-) 8 November 2001 (2001-11-08) the whole document	1-16
A	EP 0 339 607 A (ITAY, SAMUEL, DR) 2 November 1989 (1989-11-02) column 2, line 51 - column 3, line 50 column 4, line 29 - line 36 example 1 claims 1-16	1-16
A	US 5 206 023 A (HUNZIKER ET AL) 27 April 1993 (1993-04-27) column 3, line 35 - line 60 column 5, line 59 - column 6, line 30 column 7, line 26 - column 8, line 23 claims 1-24	1-16

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/011287

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 02/094377 A (TROMMSDORFF GMBH & CO ;SUSILO RUDY (DE)) 28 November 2002 (2002-11-28) page 1, line 10 - line 12 page 4, line 23 - page 5, line 28 claims 1-7	1-16

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2004/011287

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 1-13,15,16 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/011287

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4954349	A	04-09-1990	
		AU 2204388 A	16-03-1989
		BE 1001842 A3	20-03-1990
		CH 677612 A5	14-06-1991
		DE 3830563 A1	30-03-1989
		DK 501288 A	12-03-1989
		FR 2620334 A1	17-03-1989
		GB 2209668 A ,B	24-05-1989
		IT 1227010 B	05-03-1991
		JP 1100128 A	18-04-1989
		LU 87331 A1	26-10-1989
		NL 8802224 A	03-04-1989
		SE 8803125 A	12-03-1989
US 6211143	B1	03-04-2001	
		WO 9948516 A1	30-09-1999
US 6248368	B1	19-06-2001	
		IT 1272994 B	01-07-1997
		AT 229809 T	15-01-2003
		AU 691617 B2	21-05-1998
		AU 2574295 A	18-12-1995
		CA 2190847 A1	30-11-1995
		CN 1149255 A ,C	07-05-1997
		DE 69529213 D1	30-01-2003
		DE 69529213 T2	13-11-2003
		DK 760668 T3	31-03-2003
		EP 0760668 A1	12-03-1997
		ES 2188663 T3	01-07-2003
		WO 9531991 A2	30-11-1995
		JP 10500678 T	20-01-1998
		PT 760668 T	30-04-2003
		RU 2163487 C2	27-02-2001
		SI 760668 T1	30-06-2003
		US 2001041191 A1	15-11-2001
US 2002082623	A1	27-06-2002	
		AT 290353 T	15-03-2005
		AU 779472 B2	27-01-2005
		AU 6566000 A	13-02-2001
		CA 2378079 A1	01-02-2001
		CZ 20020341 A3	11-09-2002
		DE 60018576 D1	14-04-2005
		WO 0106949 A2	01-02-2001
		EP 1206225 A2	22-05-2002
		EP 1441028 A2	28-07-2004
		JP 2003505143 T	12-02-2003
		NO 20020439 A	28-01-2002
		NZ 517199 A	28-11-2003
		ZA 200200514 A	30-06-2003
WO 9718299	A	22-05-1997	
		AT 288480 T	15-02-2005
		AU 713280 B2	25-11-1999
		AU 7735196 A	05-06-1997
		CA 2237890 A1	22-05-1997
		DE 69634303 D1	10-03-2005
		DK 868505 T3	06-06-2005
		EP 0868505 A1	07-10-1998
		JP 2000516802 T	19-12-2000
		WO 9718299 A1	22-05-1997
		US 5908784 A	01-06-1999

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/011287

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 02061052	A	08-08-2002	CA 2434281 A1	08-08-2002
			CZ 20032082 A3	12-11-2003
			WO 02061052 A2	08-08-2002
			EP 1356024 A2	29-10-2003
			JP 2004524839 T	19-08-2004
			NO 20033396 A	30-09-2003
			US 2004077079 A1	22-04-2004
			ZA 200305771 A	25-10-2004
US 2003103947	A1	05-06-2003	NONE	
WO 0182994	A	08-11-2001	AU 5576701 A	12-11-2001
			WO 0182994 A1	08-11-2001
			US 2002015719 A1	07-02-2002
EP 0339607	A	02-11-1989	US 5053050 A	01-10-1991
			US 4904259 A	27-02-1990
			AT 85524 T	15-02-1993
			AU 625913 B2	16-07-1992
			AU 3380889 A	02-11-1989
			DE 68904800 D1	25-03-1993
			DE 68904800 T2	05-08-1993
			EP 0339607 A2	02-11-1989
			ES 2051914 T3	01-07-1994
			IL 90075 A	26-08-1994
			JP 2209811 A	21-08-1990
			JP 2858782 B2	17-02-1999
			ZA 8903074 A	29-05-1991
			CA 1341078 C	08-08-2000
US 5206023	A	27-04-1993	AT 121943 T	15-05-1995
			AU 667032 B2	07-03-1996
			AU 1412892 A	07-09-1992
			CA 2101556 A1	01-08-1992
			CN 1064813 A , C	30-09-1992
			DE 69202332 D1	08-06-1995
			DE 69202332 T2	04-01-1996
			DK 569541 T3	10-07-1995
			EP 0569541 A1	18-11-1993
			ES 2072144 T3	01-07-1995
			HK 1006416 A1	26-02-1999
			IE 920309 A1	29-07-1992
			IL 100799 A	16-10-1996
			JP 6505258 T	16-06-1994
			JP 2004230184 A	19-08-2004
			KR 235391 B1	15-12-1999
			NO 932748 A	29-09-1993
			NZ 260125 A	27-07-1997
			TW 505518 B	11-10-2002
			WO 9213565 A1	20-08-1992
			US 5853746 A	29-12-1998
			US 5368858 A	29-11-1994
			ZA 9200726 A	25-11-1992
WO 02094377	A	28-11-2002	DE 10126405 A1	27-02-2003
			WO 02094377 A2	28-11-2002
			DE 10292147 D2	29-04-2004